THE FORMALITY REJECTIONS UNDER 35 U.S.C. § 112

A) The Rejections

In the Office Action, the Examiner set forth several formality rejections under 35 U.S.C. § 112, first paragraph. These are as follows:

> Claims 1-17, 19 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
>
> The phthalic acid and terephthalic acid of claim 1 and 19 do not qualify as isophthalic acid. "Isophthalic acid polyamide" must be construed as requiring units from isophthalic acid. Any other interpretation would be repugnant to the ordinary meaning.
>
> "Olefin ester" of claims 12 and 13 is not the copolymer of olefin and acrylate intended. The specification does not suggest any compounds having both an olefin (i.e. unsaturated) group and an ester group.
>
> It is not possible that the polyamide including units from isophthalic acid could be a "homopolymer" as required in claim 16. A diamine monomer must have been included because a polyamide cannot be made solely from an acid.
>
> It is not seen how claim 30 limits claim 29.

B) The Response

In reply to the formality rejections, the claims have been amended to overcome the rejections. Specifically, the term "phthalic" has been substituted for "isophthalic" in order to avoid any alleged confusion concerning the nature of the phthalic acid polyamides utilized in the present invention. Additionally, claims 12-13 have been deleted and claim 16 has been amended in order to avoid confusion to the references "olefin ester" and "homopolymer" that originally appeared therein. Claim 30 has been amended in order to include reference to an ionomer and an acrylate in the mantle layer.

In view of these amendments, it is respectfully submitted that the formality rejections have been surpassed. Withdrawal of these rejections is respectfully requested.

THE SUBSTANTIVE REJECTIONS UNDER 35 U.S.C. § 102 AND 103

A) The Rejections

The following alleged prior art rejections were noted by the Examiner in the Office Action:

> Claims 29 and 30 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Bissonette Patent.
>
> Bissonette teaches golf balls having a center, a cover and a wound thread layer in between. The thread can be polyphenylene terephthalamide (col. 6, line 25).
>
> Claims 1-7, 15, 16, 18-24 and 29-31 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Rajagopalan '862 Patent.
>
> Rajagopalan suggests two or three piece golf balls. At least one of the layers is a sulfonated or phosphonated ionomer optionally blended with a polyamide (col. 29, line 51-53). The polyamide can be based on isophthalic acid (col. 30, line 55).
>
> Claims 18-21 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(b) as obvious over the Deleens Patent.
>
> Deleens produces golf ball covers of polyether-ester-amide. Terephthalic or isophthalic acid (col. 3, line 42) can be used in the synthesis.
>
> Claims 1-7, 11, 14-24 and 31 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over J10305116 Patent.
>
> The reference blends ionomer and polyetheramide for use as golf ball covers. The polyetheramide also contains aromatic ester groups (see formula I).
>
> Presumably the same interactions between the ionomer and polyamide will be present in the reference as is for applicant (page 8, lines 5-17).
>
> Claims 1-7, 11, 14-24 and 31 are rejected under 35 U.S..C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the J62022841 Patent.
>
> The reference produces golf ball covers of ionomer and a polyester amide from terephthalic acid (see registry No. 110485-64-8).
>
> Claims 1-11 and 14-31 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Rajagopalan WP 98/40127 Patent.
>
> Rajagopalan claims golf ball covers of 10-80% ionomer and 90-20% polyamide (claim 1). The polyamide can include

units from terephthalic acid (page 15, line 4). The COR is high (Table II). Some of the ionomers used by Rajagopalan (i.e. surlyn 9320, 9020, 8320) are known to be terpolymer ionomers which are based on ethylene/acrylate/acid terpolymers (see applicant's Table 6). These ionomers have ester groups.

Claims 8-10 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rajagopalan '862 Patent or the Deleens Patent or J10305116 or J6Z022841 or Rajagopalan WP 98/40127 in view of Sullivan '304.

The primary references may not report compression or COR values for their balls. However, these values are conventional as shown by Sullivan's table (col. 23). It would have been obvious to ensure the balls of primary references have compression and COR values within normal parameters.

.....

Claim 17 [is] rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 1 of prior U.S. Patent No. 6384140. This is a double patenting rejection.

Claims 1-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6384140. Although the conflicting claims are not identical, they are not patentably distinct from each other because the current application also claims blends of ionomer with polyphthalamide except that the claims are broader in the sense that ethylene/acrylate is not required to be present and the ionomer is open to being any ionomeric material.

Bersted (col. 4, lines 42-49) is cited for its definition of polyphthalamide that allows for units other than terephthalamide and isophthalamide.

B) The Response

The present application has been amended in order to overcome many of the above-noted rejections. Specifically, the present application is now a continuation-in-part of U.S. Patent No. 6,384,140 to Melanson et al. A Terminal Disclaimer directed to this patent is also attached hereto. As a result, the Examiner's previous 35 U.S.C. §§ 101, 102(e) and 103(a) rejections concerning the Melanson et al. '140 patent have been surpassed.

Similarly, since the present application is now a continuation-in-part of the Melanson et al. '140 patent, the Examiner's previous rejections over Bissonette et al. (U.S. Patent No. 6,149,535), Rajagopalan (U.S. Patent No. 6,245,862), Takemura (JP 10305116), and

Rajagopalan (WO 98/40127), and/or any combination of these references with others, are no longer applicable. Accordingly, the Examiner is respectfully requested to reverse these rejections.

Additionally, with respect to the Examiner's previous 35 U.S.C. §§ 102(e) and 103 rejections of claims 29-30 over Bissonette et al., please also note that these claims have been amended to further avoid this reference. Specifically, the invention set forth in amended claims 29-30 is directed to a solid golf ball and not the wound golf ball disclosed in Bissonette et al.

Similarly, claims 18-21 have been amended in order to further distinguish the invention of the amended claims from that disclosed in Deleens et al. (U.S. Patent No. 4,234,184). As noted now in amended claim 18, the cover layer includes the combination of a phthalic acid polyamide and an olefin/alkyl (meth)acrylate/carboxylic acid terpolymer. Consequently, the amended claims are clearly distinguishable from the disclosure set forth in Deleens et al.

Moreover, with respect to the alleged teachings of Narasaki et al. (JP 62022841), the compound cited by the Examiner as Registry No 110485-64-8 does not appear from the information provided to be a polyester phthalic acid polyamide. As a result, withdrawal of the previous rejection concerning this reference is also respectfully requested.

Lastly, Applicants respectfully object to the Examiner's blanket assertion that the balls of several of the references cited would possess the compression or C.O.R. ratios of the claimed balls. Since polyamides are hard and/or brittle and generally not used in commercial golf ball construction, it is unknown whether any of the golf balls of the references cited would have the compression and/or C.O.R. values of the claimed balls.

CONCLUSION

For at least the reasons set forth above, it is respectfully submitted that the pending claims are in condition for allowance. Early notification to that extent is respectfully requested. Attached hereto is also a marked-up version of the changes made to the claims by this Amendment.

Respectfully submitted,

FAY, SHARPE, FAGAN,
MINNICH & McKEE, LLP

DATED: December 20, 2002

Richard M. Klein
Reg. No. 33,000
1100 Superior Avenue
Seventh Floor
Cleveland, Ohio 44114-2518
Tel: (216) 861-5582
Fax: (216) 241-1666

CERTIFICATE OF EXPRESS MAILING

"Express Mail" Mailing Label Number: EV 178757643 US

Date of Deposit: December 20, 2002

I hereby certify that this **Amendment** is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" Service on the date indicated above and addressed to the Assistant Commissioner For Patents, Washington, D.C. 20231.

Lynda S. Kalemba

N:\SLDZ\200236\lsk0919A.doc

VERSION OF CLAIMS
WITH MARKINGS TO SHOW CHANGES MADE
December 20, 2002

Please delete claims 12 and 13, and amend claims 1, 16, 18-24, 29 and 30 as follows:

1. (Amended) A golf ball having a cover and a core centrally disposed within said cover, said cover including a combination of a first component and a second component, wherein

said first component comprises [an isophthalic] a phthalic acid polyamide formed from reacting an agent including at least one of phthalic acid, isophthalic acid, and terephthalic acid; and

said second component comprises an ionomer.

16. (Amended) The golf ball according to claim 1, wherein said first component is a polyphthalamide [homopolymer] and said second component is an ionomeric terpolymer.

18. (Amended) A golf ball comprising:

a core; and

a cover layer disposed about said core, said cover layer including [an isophthalic] a phthalic acid polyamide and an olefin/alkyl (meth)acrylate/carboxylic acid terpolymer.

19. (Amended) The golf ball of claim 18 wherein said [isophthalic] phthalic acid polyamide is formed from at least one of phthalic acid, isophthalic acid, and terephthalic acid.

20. (Amended) The golf ball of claim 18 wherein said [isophthalic] phthalic acid polyamide exhibits a melting point of about 590°F.

21. (Amended) The golf ball of claim 18 wherein said [isophthalic] phthalic acid polyamide has a specific gravity of about 1.15.

22. (Amended) The golf ball of claim 18 wherein said cover layer includes from about 10% to about 60% of said [isophthalic] phthalic acid polyamide based upon the weight of said cover layer.

23. (Amended) The golf ball of claim 22 wherein said cover layer includes from about 15% to about 50% of said [isophthalic] phthalic acid polyamide based upon the weight of said cover layer.

24. (Amended) The golf ball of claim 23 wherein said cover layer includes from about 20% to about 40% of said [isophthalic] phthalic acid polyamide based upon the weight of said cover layer.

29. (Amended) A solid golf ball comprising:

a core;

a mantle layer disposed about said core; and

a cover layer disposed on said mantle;

wherein said mantle layer comprises [an isophthalic] a phthalic acid polyamide.

30. (Amended) The golf ball of claim 29 wherein said mantle layer comprises polyphthalamide, an ionomer, and an acrylate.